

MNK-N

Multi-jet wet dial meters for cold water

MNK-N is an MID compliant water meter for service connection. The current level of development guarantees the most precise measurement results, minimum bearing load and a long service life.

The meter is equipped with a reed switch interface as standard.

The interface enables remote reading of the meter data via PDC radio module with LoRaWAN® or wM-Bus.

All materials, which are used in the drinking water section, comply with the required standards, guidelines and the current German drinking water approval (other country-specific drinking water approvals on request).



Performance characteristics in overview

- Multi-jet wet dial meter
- For horizontal and vertical installation, also available in standpipe and downpipe design on request
- Register cap made of high-quality UV-resistant polymer plastic
- Brass body according to UBA (Federal Environment Office) list
- Operating pressure MAP 16
- Approved according to MID

Applications

- For the consumption measurement of cold and clean drinking water or service water up to 50 °C

AMR options

- Retrofittable with PDC module (PulseDataCapture):
 - wireless M-Bus radio module (868 MHz)
 - LPWAN-Radio module for LoRaWAN®
- Retrofittable with reed switch:
 - Standard resolution 10 l/pulse

Technical data

Permanent Flowrate	Q_3	m ³ /h	2.5	2.5	2.5	2.5	2.5
Attainable measuring range ¹	Q_3/Q_1	R	200H/50V	200H/50V	200H/50V	200H/50V	200H/50V
Comparable to metrological class (EEC)	Klasse		C-H/A-V	C-H/A-V	C-H/A-V	C-H/A-V	C-H/A-V
Overload Flowrate	Q_4	m ³ /h	3.13	3.13	3.13	3.13	3.13
Transitional Flowrate ²	Q_2	l/h	20H/80V	20H/80V	20H/80V	20H/80V	20H/80V
Minimum Flowrate ²	Q_1	l/h	13H/50V	13H/50V	13H/50V	13H/50V	13H/50V
Start-up flow rate	-	l/h	<4	<4	<4	<4	<4
Display range	min	l	0.1	0.1	0.1	0.1	0.1
	max	m ³	99999	99999	99999	99999	99999
Temperature range	-	°C	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16
Pulse value (Reed-Pulser or PDC)	-	l/Imp.	10/100	10/100	10/100	10/100	10/100
Pressure loss class at Q_3	Δp	bar	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical ambient conditions	-	-	M1	M1	M1	M1	M1
Climatic ambient conditions ³	-	°C	5 - 55	5 - 55	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0

Dimensions and weights:

Nominal diameter	DN	mm	15	15	20	20	25
		Inch	1/2"	1/2"	3/4"	3/4"	1"
Overall length without connectors ¹	L2	mm	110	165/170	130	190	175
Overall length with connectors approx.	L1	mm	190	245/250	226	286	255
Thread meter G x B	D1	Inch	3/4"	3/4"	1"	1"	1 1/4"
Thread connector R x	D2	Inch	1/2"	1/2"	3/4"	3/4"	1"
Width approx.	B	mm	95	95	95	95	95
Height approx.	H1	mm	120	120	120	120	120
	H2	mm	~30	~35	~25	~25	~40
Weight approx.	-	kg	1.2	1.3	1.3	1.45	1.8

¹ Other measuring ranges (R) and overall lengths on request

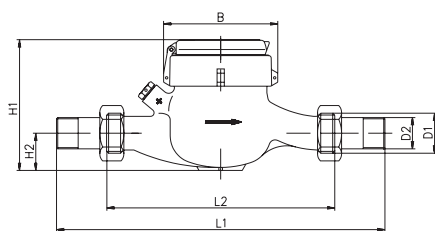
² The data refers to the maximum measuring range

³ Condensation possible

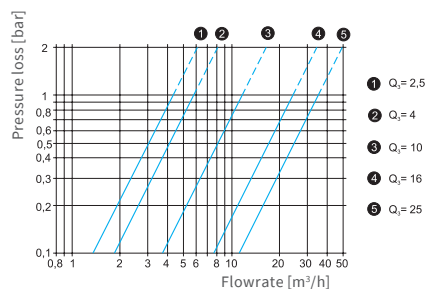
⁴ Only for horizontal installation

⁵ Flanges according to ISO 7005-2 / EN 1092-2

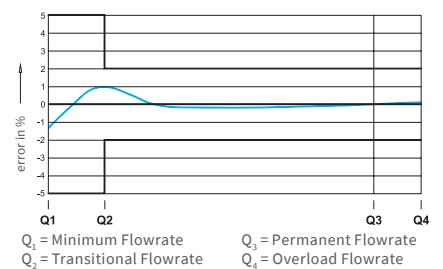
Attention: not all versions are available in all markets



Dimensions



Typical pressure loss curve



Typical error curve

Technical data

Permanent Flowrate	Q_3	m ³ /h	4	4	4	4
Attainable measuring range ¹	Q_3/Q_1	R	200H/80V	200H/80V	200H/80V	200H/80V
Comparable to metrological class (EEC)	Klasse		C-H/B-V	C-H/B-V	C-H/B-V	C-H/B-V
Overload Flowrate	Q_4	m ³ /h	5	5	5	5
Transitional Flowrate ²	Q_2	l/h	32H/80V	32H/80V	32H/80V	32H/80V
Minimum Flowrate ²	Q_1	l/h	20H/50V	20H/50V	20H/50V	20H/50V
Start-up flow rate	-	l/h	<5	<5	<5	<5
Display range	min	l	0.1	0.1	0.1	0.1
	max	m ³	99999	99999	99999	99999
Temperature range	-	°C	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16
Pulse value (Reed-Pulser or PDC)	-	l/Imp.	10/100	10/100	10/100	10/100
Pressure loss class at Q_3	Δp	bar	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical ambient conditions	-	-	M2	M2	M2	M2
Climatic ambient conditions ³	-	°C	5 - 55	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0

Dimensions and weights:

Nominal diameter	DN	mm	20	20	20	25
		Inch	3/4"	3/4"	3/4"	1"
Overall length without connectors ¹	L2	mm	130	165/190	220	175
Overall length with connectors approx.	L1	mm	226	261/286	316	293
Thread meter G x B	D1	Inch	1"	1"	1"	1 1/4"
Thread connector R x	D2	Inch	3/4"	3/4"	3/4"	1"
Width approx.	B	mm	95	95	95	95
Height approx.	H1	mm	120	120	120	120
	H2	mm	~25	~25	~35	~40
Weight approx.	-	kg	1.3	1.4/1.45	1.6	1.7

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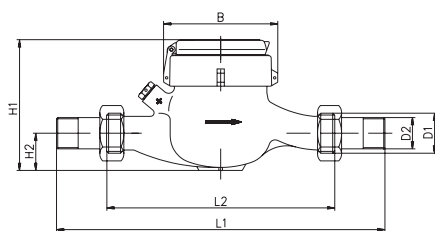
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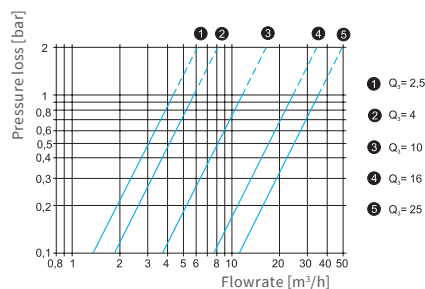
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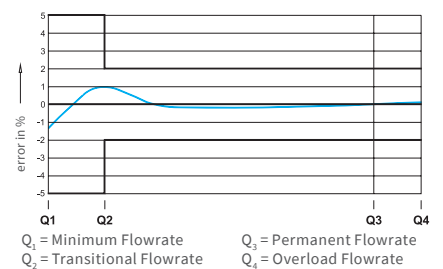
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Dimensions



Typical pressure loss curve



Typical error curve

Technical data

Permanent Flowrate	Q_3	m ³ /h	6.3	10	10	16	16
Attainable measuring range ¹	Q_3/Q_1	R	200H/80V	200H/80V	200H/80V	200H/63V	200H/63V
Comparable to metrological class (EEC)	Klasse		C-H/B-V	C-H/B-V	C-H/B-V	C-H/A-V	C-H/A-V
Overload Flowrate	Q_4	m ³ /h	7.88	12.5	12.5	20	20
Transitional Flowrate ²	Q_2	l/h	50H/126V	80H/200V	80H/200V	128H/406V	128H/406V
Minimum Flowrate ²	Q_1	l/h	32H/79V	50H/125V	50H/125V	80H/254V	80H/254V
Start-up flow rate	-	l/h	<10	<10	<10	<20	<20
Display range	min	l	0.1	0.1	0.1	0.1	0.1
	max	m ³	99999	99999	99999	99999	99999
Temperature range	-	°C	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16
Pulse value (Reed-Pulser or PDC)	-	l/Imp.	10/100	10/100	10/100	10/100	10/100
Pressure loss class at Q_3	Δp	bar	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical ambient conditions	-	-	M2	M2	M2	M2	M2
Climatic ambient conditions ³	-	°C	5 - 55	5 - 55	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0

Dimensions and weights:

Nominal diameter	DN	mm	25	25	32	40	40
		Inch	1"	1"	1 1/4"	1 1/2"	1 1/2"
Overall length without connectors ¹	L2	mm	175/260	175/260	260	300	270
Overall length with connectors approx.	L1	mm	293/378	293/378	384	428	---
Thread meter G x B	D1	Inch	1 1/4"	1 1/4"	1 1/2"	2"	Flange ⁵
Thread connector R x	D2	Inch	1"	1"	1 1/4"	1 1/2"	---
Width approx.	B	mm	95	95	95	110	110
Height approx.	H1	mm	120	120	120	145	160
	H2	mm	~40	~40	~40	~50	~70
Weight approx.	-	kg	1.7/2.1	1.7/2.1	2.2	3.6	7.5

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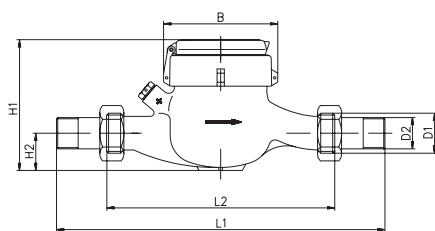
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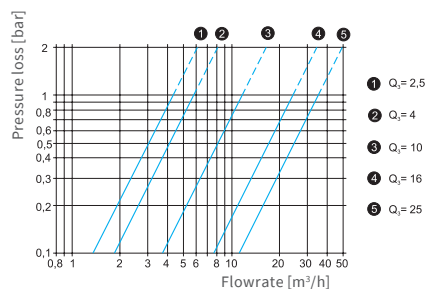
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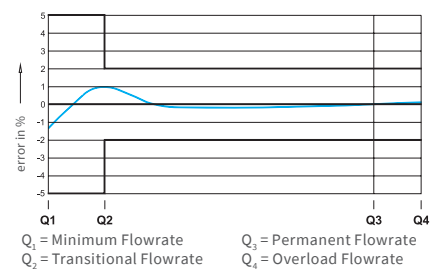
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Dimensions



Typical pressure loss curve



Typical error curve

Technical data					
Permanent Flowrate	Q_3	m ³ /h	25 ⁴	25 ⁴	25 ⁴
Attainable measuring range ¹	Q_3/Q_1	R	160H	160H	160H
Comparable to metrological class (EEC)	Klasse		C-H	C-H	C-H
Overload Flowrate	Q_4	m ³ /h	31.3	31.3	31.3
Transitional Flowrate ²	Q_2	l/h	250H	250H	250H
Minimum Flowrate ²	Q_1	l/h	156H	156H	156H
Start-up flow rate	-	l/h	<25	<25	<25
Display range	min	l	0.1	0.1	0.1
	max	m ³	99999	99999	99999
Temperature range	-	°C	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	0.3 - 16	0.3 - 16	0.3 - 16
Pulse value (Reed-Pulser or PDC)	-	l/Imp.	10/100	10/100	10/100
Pressure loss class at Q_3	Δp	bar	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical ambient conditions	-	-	M2	M2	M2
Climatic ambient conditions ³	-	°C	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0
Dimensions and weights:					
Nominal diameter	DN	mm	50	50	50
		Inch	2"	2"	2"
Overall length without connectors ¹	L2	mm	270/300	270	300
Overall length with connectors approx.	L1	mm	414/444	---	---
Thread meter G x B	D1	Inch	2 1/2"	Flange ⁵	Flange ⁵
Thread connector R x	D2	Inch	2"	---	---
Width approx.	B	mm	110	110	110
Height approx.	H1	mm	145	165	165
	H2	mm	~60	~75	~75
Weight approx.	-	kg	3.8/4.0	8.8	9

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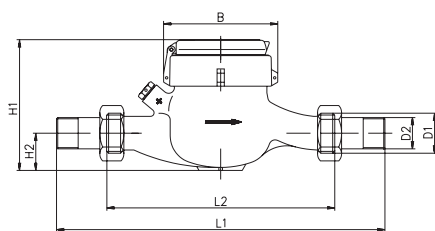
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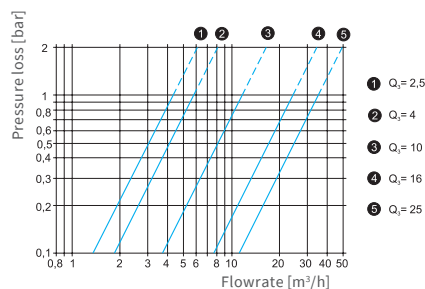
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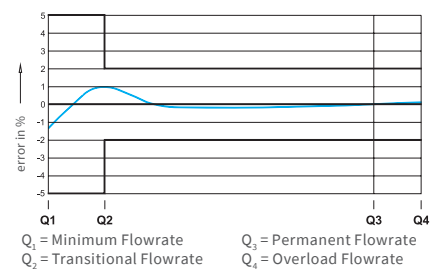
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Typical pressure loss curve



Typical error curve

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